Technical Specifications

Polycom® Architected Telepresence Experience™

ATX™ | ATX SDK

There are two distinct software solutions for the ATX platform, The ATX and the ATX Software Development Kit (SDK).
The SDK is a set of tools that enable a certified ATX partner to customize the user interface and add additional device and room controls to an overall telepresence solution. ATX software, when loaded on a specified touch panel controller and touch panel, provides a functional user interface that has the same feature set as the Polycom OTX 300 and the TPX 306M. It is important to note that the ATX SDK and ATX software solutions have some different and unique feature sets.

Solution Components	**ATX 300**	**ATX 300**	**ATX 200**	**ATX 400**
		Available for SDK Solutions only		
Polycom HDX 8000 video codecs[1] supporting 1080p/30fps or 720p/60fps	3	3	2	4
Polycom HDX Ceiling Microphone Arrays	3	3	3	3
Eagle Eye II cameras (silver)	3	3	2	4
Telepresence software	✓	✓	✓	✓
Telepresence configuration tool	✓	✓	✓	✓
Documentation Set including: Integrator's Guide, Customizable Quick Reference Card, User Guide FrameMaker source files, & Wiring Specifications	✓	✓	✓	✓
Touch panel control system software	✓	-	-	-
Touch panel programming control modules[2]	-	✓	✓	✓
GUI reference code/samples[2]	-	✓	✓	✓
Meeting Composer and Polycom CMA directory integration support	✓	Similar functionality may be programmed by integrator	Similar functionality may be programmed by integrator	Similar functionality may be programmed by integrator

[1] *The HDX software for ATX is different from the HDX software for ATX SDK. You cannot use the HDX software for ATX version with ATX SDK or vice versa, so be sure to download the correct software for your site.*

[2] *Download via touch panel controller vendor web site*

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H.264 High Profile Bandwidth Requirements

Support for the following data rates with QoS enabled, bidirectional, with a 50% burst increase within 100ms window. Bandwidth estimates are based on network traffic in one direction and do not include overhead and management traffic.

Performance

- Packet loss < 0.1%
- End to end latency <150 ms
- Packet jitter < 40 ms

ATX 200			
Frame Rate	**Minimum**	**Recommended**	**Maximum**
1080p30 High Profile	3 Mbps per suite	6 Mbps per suite	12 Mbps per suite
720p60 High Profile	3 Mbps per suite	6 Mbps per suite	12 Mbps per suite
ATX 300			
Frame Rate	**Minimum**	**Recommended**	**Maximum**
1080p30 High Profile	4.5 Mbps per suite	9 Mbps per suite	18 Mbps per suite
720p60 High Profile	4.5 Mbps per suite	9 Mbps per suite	18 Mbps per suite
ATX 400			
Frame Rate	**Minimum**	**Recommended**	**Maximum**
1080p30 High Profile	6 Mbps per suite	12 Mbps per suite	24 Mbps per suite
720p60 High Profile	6 Mbps per suite	12 Mbps per suite	24 Mbps per suite

Note: Two and Four screen/codec solutions (ATX SDK 200 & 400) are available using the ATX SDK only

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H.264 Bandwidth Requirements (not High Profile)

ATX 200		
Frame Rate	**Minimum**	**Recommended**
1080p30	9 Mbps per suite	18 Mbps per suite
720p60	6 Mbps per suite	12 Mbps per suite
ATX 300		
Frame Rate	**Minimum**	**Recommended**
1080p30	9 Mbps per suite	18 Mbps per suite
720p60	6 Mbps per suite	12 Mbps per suite
ATX 400		
Frame Rate	**Minimum**	**Recommended**
1080p30	12 Mbps per suite	24 Mbps per suite
720p60	8 Mbps per suite	16 Mbps per suite

Note: Two and Four screen/codec solutions (ATX SDK 200 & 400) are available using the ATX SDK only

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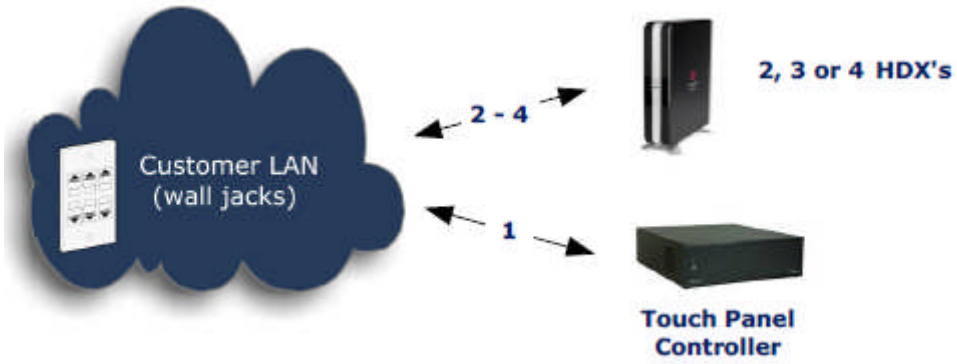
LAN Connection Requirements

The supported LAN wiring option for the ATX include:

- Home runs for ATX and the Touch Panel Control

For voice add-on, you will need to supply an **analog line**. Voice add-on is necessary to enable access to a VNOC or other help desk.

ATX Default Network Configuration



Required LAN connections

The ATX solution needs the following number of 100/1000BASE-T network connections, on RJ-45 connectors as well as static IP addresses.

HDXs	Touch Panel Controller	Total
2	1	3
3	1	4
4	1	5

Note: Two and Four screen/codec solutions (ATX SDK 200 & 400) are available using the ATX SDK only

Room Size Requirements

	Width		Depth		Ceiling Height (min)	
	Minimum	Recommended	Minimum	Recommended	Minimum	Recommended
ATX 200	18 ft (5.5m)	24 ft (7.3m)	13 ft 6 in (4.11m)	15 ft (4.6m)	8 ft (2.4m)	8ft 8 in (2.7m)
ATX 300	18 ft (5.5m)	24 ft (7.3)	13 ft 6 in (4.11m)	15 ft (4.6)	8 ft (2.4m)	8ft 8 in (2.7m)
ATX 400	28 ft (8.5 m)	34 ft (10.4m)	13 ft 6 in (4.11m)	15 ft (4.6m)	8 ft (2.4m)	8ft 8 in (2.7m)

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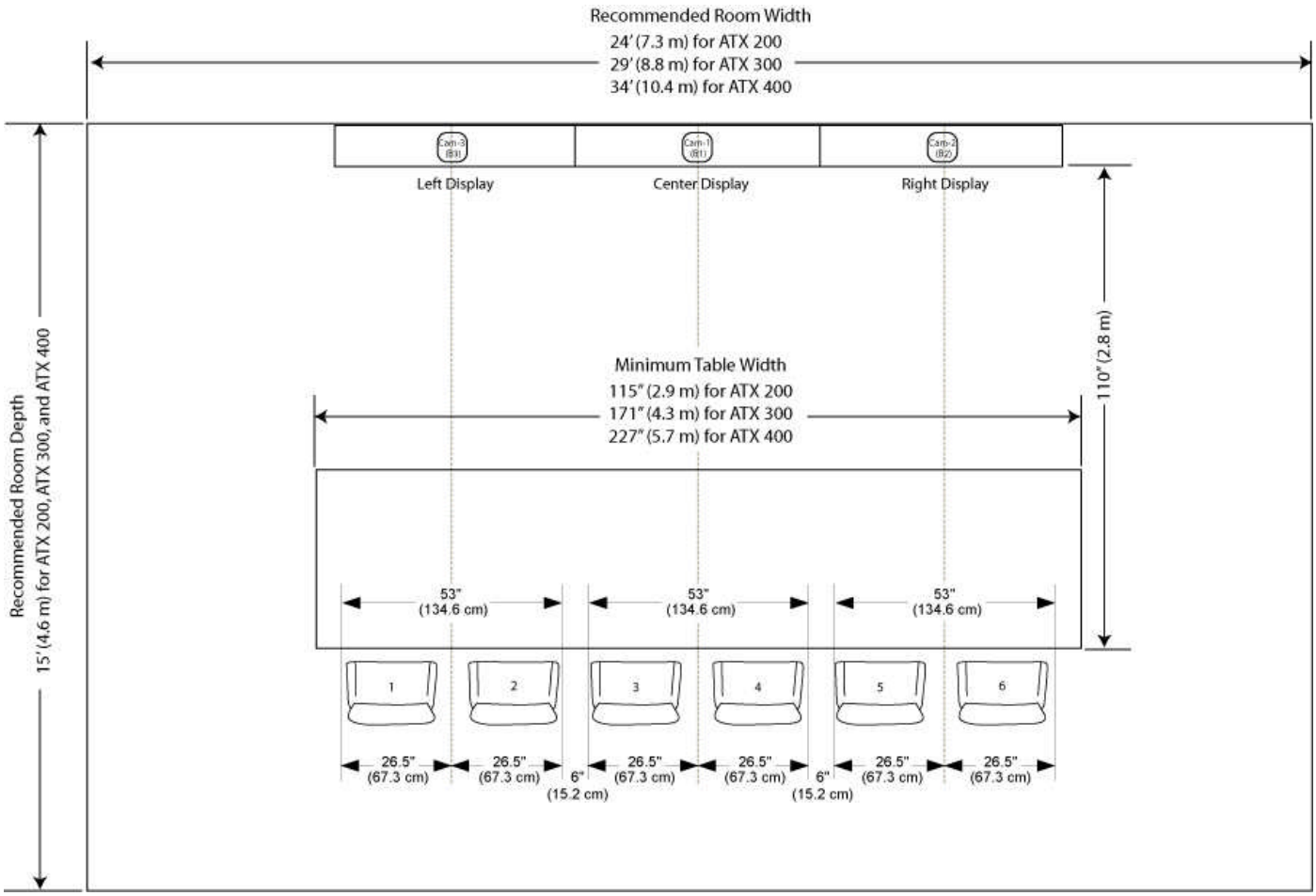
Floor Layout (Guidelines to achieve best quality, Immersive Telepresence Experience)



The information provided is a guideline only. It will allow for a highly immersive, real-size, telepresence solution for a typical conference room with a rectangular table. Integrators may also achieve high quality telepresence solutions based on the ATX platform in a wide variety of room sizes and table shapes, and seating arrangements.

Please note: The image above depicts the ATX 300. The depth of the room and the distance from the display to the back of the table are true for all three products. Width will adjust based on the solution implemented.

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Power for Polycom supplied components			
	Standby	**In Use** (Max call rate with Content and Document sharing)	**Maximum** (will not exceed)
ATX 200	200W	200W	250W
ATX 300	300W	300W	375W
ATX 400	400W	400W	500W
Important: *This calculation includes ONLY the components supplied as part of the Polycom ATX 300 Solution. The total power consumption will need to be recalculated by the integrator to include components that complete the solution.*			

Environmental Conditions	
Conference room operating temperature	41-86° F, 5-30° C
Relative humidity	20% to 80% (non-condensing)
Sound Pressure Level	NC18 to NC25, Maximum 40 dBA level

Non-Operating / Storage Constraints	
Non- operating temperature	32-104° F, 0-40° C
Relative humidity	10% to 90% (non-condensing)

Regulatory Compliance

- CE Marking
- FCC Part 15 Class A

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User Interface (touch panel specifications) for ATX Software*

The color Touch Panel is the interface for ATX*. It enables you to place video and audio calls, hang up calls, control the audio and perform other telepresence conferencing tasks.

Below is a summary of the available tasks you may control via the color Touch Panel.

Button/Function	**Description**
Make a video call	The user has the ability to dial manually or speed dial. There are 18 speed dial buttons available (9 buttons will appear on the home screen at a time.)
Previous Page/Next Page	Buttons allow the user to view additional speed dial buttons
Make an audio call	Use the audio call button to make an audio only call or to add in an audio participant during a video call. There are 4 audio speed dial buttons available.
Hang Up	Allows the user to end the call
Audio Control	Allows the user to raise, lower or mute the audio
Audio Level	Horizontal bar indicating current audio level
Content indicator	Icon, when lit, indicates the far end is sharing content; also allows the user to start and stop sharing content
Help Desk	Button set up by the system administrator to place an audio call to assist users should they experience technical difficulties or have a question.

*Buttons and functions for ATX SDK users will vary depending on integrator design

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Integrator Supplied Components **Guidelines to achieve best quality, immersive telepresence experience.**			
Display	• 58” - 65” • Bezels on right and left side of display no larger than 3” • Each display must have an HDMI input • Display must have a Sleep or Standby setting		
Table Minimum requirements	**ATX 200** 115 in. 292.1 cm	**ATX 300** 171 in. 434.3 cm	**ATX 400** 227 in. 576.6 cm
Touch Panel and Controller for ATX	• Crestron TPS-4000 10.4” tilt touch panel and TPS-IMPC (touch panel interface module) • Crestron AV2 control system and C2ENET-1 Ethernet interface expansion card		
Touch Panel and Controller for ATX SDK	• Contact Crestron and AMX for current list of supported systems		
Content Display	• VGA 1024x768 input signal		
Speakers	• Polycom Stereo Speaker Kit (or equivalent) • Omnimount universal speaker mounting bracket (recommended for wall mounting speakers)		
Other	• Non-Polycom components, furniture, and services to provide a complete solution		

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Inputs/Outputs

The ATX supports the following input/output definitions. Please refer to the ATX System Wiring Specification found on the Partner Resource Center for more details.

AUDIO

	Inputs		
Label	AUX	3	4
Connector	RCA	RCA	3.5mm
Signal Type Supported	Line/Mic level	Line level	Line level
Association	Always mixed in	VCR/DVD (Video 3)	PC (Video 4)

Outputs	
VCR/DVD	Monitor 1
RCA	RCA
Line level	Line level
All audio	All audio except mics and aux

VIDEO

	Inputs			
Label	1	2	3	4
Connector	HDCI	HDCI	S-Video	DVI-I
Signal Type Supported	Composite S-Video Component	Composite S-Video Component	Composite S-Video	VGA DVI-d
Association			Audio 3	Audio 4

Outputs		
VCR/DVD	Monitor 1	Monitor 2
S-Video	DVI-I	DVI-I
Composite S-Video	DVI HDMI VGA Component	DVI HDMI VGA Component

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